

The Patent Prosecution Highway: A Global Superhighway to Changing Validity Standards
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I. *Introduction*

Petitioners in the recent United States Supreme Court case *Microsoft Corp. v. i4i Ltd. Partnership* have aptly stated: “the selection of an appropriate standard of proof ... is essential to avoid distorting the patent system.”¹ The evidentiary standard defines the presumption of validity afforded to issued patents in the United States and is currently under scrutiny.² As the Supreme Court of the United States ponders the issue of what evidentiary standard applies to prior art that was not in front of the United States Patent and Trademark Office (USPTO), the director of the USPTO is actively seeking out work-share agreements that have the potential to increase the amount of art not examined by U.S. examiners. This activity increases the likelihood of improvidently granted patents in the United States, and other member states of work-share agreements, increasing the importance of the Supreme Court decision in *Microsoft v. i4i*.

This note explores the effects of the proliferation of work-share agreements among patent offices, particularly focusing on the Patent Prosecution Highway (“PPH”). This note presents the problems associated with the PPH network and provides recommendations to both potential patent applicants, as well as patent offices, to reduce risks created by utilizing the PPH network.

Work-share agreements have arisen out of a need to control the backlog within patent offices worldwide; a backlog born out of ever-growing application numbers and ever-shrinking

¹ Brief for Petitioner, *Microsoft Co. v. i4i Ltd. Partnership*, 131 S. Ct. 647 (*petition for cert. filed Aug. 27, 2010*) (No. 10-290), 2011 WL 1225714, at *19.

² See 35 U.S.C. § 282 (2000). It is unlikely that Congress will amend this statutory presumption, even in the face of patent reform efforts in 2011. See American Invents Act, S. 23, 112th Cong. (as passed by Senate, Mar. 8, 2011). This leaves the evidentiary standard imposed by the courts as the battle ground to reforming the presumption of validity in the United States.

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budget numbers.³ For example, the USPTO has recently seen its budget trimmed by approximately 10% of its monthly operating budget by the federal budget compromise passed in March 2011.⁴ Throughout the 1990's and into the new millennium, global patent applications rose by approximately 20-30% per annum. These trends translate into a growing pendency period for average applications within a patent office. During the 2009 fiscal year, a patent in the United States had an average first action pendency of 25.8 months and an average total pendency of 34.6 months,⁵ an increase of nearly 30% from 26.7 months in 2003.⁶ These two trends, reflected globally and typified in the U.S., present the need to sound a call to action for patent agencies around the world.

During the 21st Century the USPTO put forth several proposals aimed at decreasing the pendency of applications and the backlog of applications that had been created in the office.⁷ The European Offices also put forth plans to overhaul examination procedures, mainly aimed at decreasing pendency and increasing quality.⁸ In the U.S., during George W. Bush's Presidency, the USPTO began looking into methods of decreasing costs within the USPTO, including ways

³ See U.S. PAT. & TRADEMARK OFFICE, THE 21ST CENTURY STRATEGIC PLAN 1 (2003) [hereinafter 21ST CENTURY STRATEGIC PLAN].

⁴ Dennis Crouch, *Federal Budget Cuts = USPTO Budget Cuts?*, PATENT L. BLOG (PATENTLY-O) (April 12, 2011), <http://www.patentlyo.com/patent/2011/04/federal-budget-cuts-uspto-budget-cuts.html>; See Intellectual Property Owners Association, *Legislative Priorities: IPO Priorities on USPTO Funding*, IPO.COM (Mar. 29, 2011), <http://www.ipo.org/Content/NavigationMenu/iplawadvocacy/LegislativePriorities/default.htm>.

⁵ See U.S. PAT. AND TRADEMARK OFFICE PERFORMANCE AND ACCOUNTABILITY REP.: FISCAL YEAR 2009, at 16 (2009) available at www.uspto.gov/about/stratplan/ar/2009/2009annualreport.pdf.

⁶ See 21ST CENTURY STRATEGIC PLAN, *supra* note 3, at 13-14.

⁷ *Id.*.

⁸ E. Crab, *BEST Project in the European Patent Office*, 16 WORLD PAT. INFORMATION 159, 159-160 (1994).

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to decrease the work of examiners.⁹ These initiatives included the directive to utilize European Search Reports more intensively,¹⁰ rather than begin each U.S. search with a blank slate. This directive has lasted, while other more unilateral ideas, such as privatizing the initial prior art search, have been left behind with the transition to the Obama administration.¹¹

Authorities have sought to decrease pendency, and leverage the search of other authorities, by entering into bilateral and multilateral agreements to formally share work-product of examiners. In 2006, the United States and Japan formally entered the first work-share agreement creating the Patent Prosecution Highway pilot program between the two allies.¹² Shortly thereafter, the U.S. entered into similar pilot programs with South Korea, the European Union, and Canada.¹³

The basics of the PPH agreements are centered around removing redundancies between the offices. Traditionally, each office examines an application essentially in a vacuum of information, except for what the applicant submits. There was no formal recognition of work

⁹ For a discussion of President Bush's Management Agenda to utilize competitive sourcing to determine the viability of commercial service providers and take a "cautious approach to mutual exploitation of exam results," see 21st Century Strategic Plan, *supra* n. 8, at 13-14.

¹⁰ See John A. Jeffrey, 52 Cath. U.L. Rev. 761, 764 (2002).

¹¹ The USPTO has restated its goals and strategies to optimize patent quality, which notably do not include privatization. See U.S. PAT. & TRADEMARK OFFICE, USPTO: STRATEGIC FRAMEWORK (2010) available at www.uspto.gov/strategicplan2010.

¹² Press Release 06-35, U.S. Pat. & Trademark Office, *U.S. and Japan To Pilot Patent Prosecution Highway* (May 24, 2006) available at <http://www.uspto.gov/news/pr/2006/06-35.jsp>.

¹³ See Press Release 08-04, U.S. Pat. & Trademark Office, *USPTO Expands Patent Prosecution Highway Network to Canada, Korean Patent Offices* (Jan. 28, 2008) available at <http://www.uspto.gov/news/pr/2008/08-04.jsp>; Press Release 08-18, USPTO; Press Release 08-18, U.S. Pat. & Trademark Office, *USPTO and EPO to Pilot Patent Prosecution Highway* (Apr. 28, 2008) available at <http://www.uspto.gov/news/pr/2008/08-18.jsp>.

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done by other agencies. The PPH changes that. Member offices will now “utilize the search and examination results” of an agreeing patent office’s priority application to accelerate the review of the application. The priority office is referred to as the Office of First Filing (“OFF”), while the second office is referred to as the Office of Second Filing (“OSF”). Under the PPH, an applicant wishing to have accelerated review in a patent office may take advantage of a previous filing for that application in another patent office by applying to have examination in the Office of Second Filing fast-tracked.¹⁴ That is, an applicant receiving a ruling from the OFF that at least one claim in an application is patentable may request, under the PPH, that the OSF accelerate examination of the corresponding claims.¹⁵ The stated purpose of the PPH is to allow the OSF to utilize the search and examination results of the OFF, thereby avoiding duplication of work and expediting the examination process in the OSF.¹⁶ Some general requirements include that priority is validly claimed to the OFF, that at least one claim is allowed in the OFF, that the corresponding claim in the OSF is substantially similar, and finally that the OSF must not have begun examination yet. The agreements, as mentioned, allow for the utilization of both the search results and the examination results of the OFF. Utilizing the examination results provides a separate set of concerns relating to the substantive differences in the laws of the OFF and the OSF, an issue addressed later in this note.

¹⁴ U.S. Pat. & Trademark Office, *Patent Prosecution Highway (PPH) – Fast Track Examination of Applications*, http://www.uspto.gov/patents/init_events/pph/index.jsp (last visited Nov. 9, 2010).

¹⁵ *Id.*

¹⁶ PPH: Fast Track Examination of Applications, powerpoint presentation, available at http://www.uspto.gov/patents/init_events/pph/index.jsp (last visited Nov. 9, 2010).

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The PPH program's objectives are directed at addressing the problems identified above: increased pendency times and backlog in the offices.¹⁷ These objectives have largely been met and are leading to quicker patent disposals – both grants and rejections.¹⁸ It is important to note that while the offices are seeing a dramatic increase in speed for PPH cases, the average pendency time for all applications in the offices is still increasing.¹⁹ The lack of results for the average pendency time for all applications may suggest that the increased potential for improvidently granted patents in an OSF may outweigh the benefits afforded to offices in participating in the PPH network.

PPH agreements potentially create scenarios where the issued patent family has lower value to the patent holder, relative to traditionally examined patents, due to potentially weakened validity. Work-share agreements, typified by the PPH, may create situations wherein the relying patent office – the OSF – effectively cedes control of the examination to the priority patent office – the OFF. This cession may produce a lower quality patent examination in the OSF ultimately

¹⁷ See Press Release 06-35, *supra* note 23.

¹⁸ The USPTO reports that the average first-action pendency time for PPH applications is approximately 2-3 months from the time of filing the PPH request. Contrasting this with the average first action pendency time for non-PPH application of 25 months, it is readily apparent that the PPH applications are being moved to the front of the line for examiners in the U.S. See U.S. PAT. & TRADEMARK OFFICE, AN INTRODUCTION TO PATENT PROSECUTION HIGHWAY (PPH) available at http://www.uspto.gov/patents/init_events/pph/index.jsp (last modified Mar. 29, 2011) [hereinafter USPTO Introduction to PPH]. The USPTO has also experienced a reduction of approximately one office action per application for PPH applications (from an average of 2.7 office actions per non-PPH application down to an average of 1.7 office actions per PPH application.) *Id.* Other member states are seeing similar results. See Javier Jorge, *Report on the Patent Prosecution Highway Polot Program Between the Canadian Intellectual Property Office and the United States Patent and Trademark Office for the Period of January 28, 2008, to January 28, 2009*, at 3 (Jun. 2009)(Can.).

¹⁹ Average patent pendency time in the U.S. since the creation of the PPH has increased from 26.7 months in 2006 to 34.6 months in 2010. See U.S. Pat. & Trademark Office, 2010-2015 Strategic Plan 10 (Oct. 22, 2010) available at <http://www.uspto.gov/about/stratplan/index.jsp>.

resulting in an increasingly compromised patent system. Furthermore, by relying on the search results of another nation, the search and examination process of the OSF will inherently become bifurcated resulting in lower quality patent examinations.

This article surveys the scope of current work-share programs, focusing on the Patent Prosecution Highway, and analyzes the effect that such work-share programs have on the validity of patents issued by an OSF. Section II will introduce and survey the Patent Prosecution Highway, a frequent source of work-sharing between patent offices. Then, in Section III, this article will analyze the effect that work-share has on the presumed validity of patents in the participating countries. The analysis will focus on the presumption of validity in the United States and broaden to include Japan, Korea, and the member states of the European Union. Section IV provides strategic recommendations to practitioners and agencies utilizing the PPH to avoid adverse effects on the presumption of validity. Finally, section V provides a brief conclusion.

II. Creation and Expansion of the Patent Prosecution Highway

In 2006, the USPTO and the Japanese Patent Office initiated a pilot program aimed at reducing the backlog of patent applications by eliminating redundant work between the patent offices.²⁰ Dubbed the Patent Prosecution Highway, or PPH, additional agreements have incrementally extended the program to include permanent programs among Japan, South Korea, and the United States, as well as many pilot programs around the world.²¹ In its current shape the PPH network includes Australia, Austria, Canada, Denmark, the European Patent Office,

²⁰ Press Release 06-35, *supra* note 23.

²¹ See Press Release 08-04, *supra* note 24; Press Release 08-18, *supra* note 24.

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Finland, Germany, Hungary, Japan, Korea, Mexico, Russia, Singapore, Spain, the United Kingdom, and the United States.²² The PPH program has continued expansion into the current decade with the signing of a Memorandum of Understanding on Bilateral Cooperation between the USPTO and China's State Intellectual Property Office (SIPO). Commissioner's Tian Lipu of SIPO and David Kappos of the USPTO have expressed commitment to developing a PPH in which "both Offices can leverage each other's examination expertise to eliminate work redundancy, increase efficiency, and increase patent quality."²³

Previous attempts to create a fast-track system in the USPTO have drawn scrutiny in the patent community because of pre-examination patentability search requirements imposed upon the applicant.²⁴ The PPH seeks to eliminate onerous duties on applicants and take advantage of otherwise duplicated work. However, some have speculated that people in the patent community may seek to game the system by taking advantage of the PPH by first filing in countries simply because they have a smaller backlog than some of the traditional offices of first filing, such as the USPTO.²⁵ This tactic should not be alarming though, as first filing requirements in many

²² *Patent Prosecution Highway (PPH) – Fast Track Examination of Applications*, U.S. PAT. & TRADEMARK OFFICE, http://www.uspto.gov/patents/init_events/pph/index.jsp (last visited Mar. 15, 2011).

²³ Press Release 10-19, U.S. Pat. & Trademark Office, USPTO and SIPO Sign Memorandum of Understanding on Bilateral Cooperation (May 21, 2010) *available at* http://www.uspto.gov/news/pr/2010/10_19.jsp

²⁴ See Robert D. Gunderman & John Hammond, *The Limited Monopoly: Faster than a Speeding Bullet*, ROCHESTER ENGINEER, Feb. 2007, at 7; Dennis Crouch, *PTO Proposes New "Accelerated Examination" Procedures*, PATENTLY-O (Jun. 27, 2006), http://www.patentlyo.com/patent/2006/06/pto_proposes_ne.html (cautioning that the rules and restrictions for the Petition to Make Special may be onerous and have potential for loss of rights).

²⁵ See Robert D. Gunderman & John Hammond, *The Limited Monopoly: Rollin' Down the Highway...The Patent Prosecution Highway, that is...an opportunity for faster patents*, ROCHESTER ENGINEER, Mar. 2008, at 6 (speculating that applicants may first file in Canada to

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nations dictate where the OFF must be, based on where the invention was made or conceived.²⁶ Generally these first filing requirements can be satisfied by obtaining a foreign filing license – a process that is relatively quick and inexpensive. Foreign filing requests may increase in offices requiring them prior to foreign filing, such as the United States and China, due to a growing PPH network; increased foreign filing licenses may create a slight offset in workload for the member patent offices of the work saved by the PPH network. Practitioners utilizing the PPH do need to remain aware of possible criminal and civil penalties for improper priority filing practices, which together with the cost of filing for a foreign filing license may deter priority application forum shopping through the PPH.²⁷

By spreading the examination workload amongst patent offices, member states collectively work toward a more efficient use of resources. Of course, this practice of spreading workload ignores the fact that quality and training discrepancies may exist among the offices, a topic that will be addressed below. In broad strokes, the agreements between participating states are similar. Some exemplary agreements are discussed below.

take advantage of a smaller back-log than that of the USPTO, thus speeding the pendency period for the application along, even though no protection in Canada would have been sought but for the PPH).

²⁶ See 35 U.S.C. § 184 (2000). Perhaps this tactic should even be embraced as an efficient method of spreading the workload globally to maximize the utilization of the collective patent community's resources.

²⁷ For instance, in China, exporting state secrets may result in imprisonment. See generally Benjamin A. Shobert, *US Takes Hard Look at China's Secrets*, ASIA TIMES ONLINE (July 8, 2010) <http://www.atimes.com/atimes/China/LG08Ad01.html>.

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a. United States – Japan Program

Since the beginning of 2003, Japan and the United States have sought practices “aimed at promoting the mutual exploitation of search results to [the] maximum extent practicable.”²⁸ These efforts led to a pilot program between the nations implementing the first PPH agreement for twelve months from July 3, 2006 to July 3, 2007.²⁹ This agreement was later extended to last a total of eighteen months ending on January 3, 2008.³⁰

The results of the USPTO-JPO pilot program were received positively by both patent offices; the program was made permanent on January 3, 2008.³¹ The results show: (1) that applicants have been able to expeditiously obtain a patent in the OSF at an early stage, by utilizing the petition to make special procedures currently available in the OSF, based on claims that have been allowed in the Office of First Filing, (2) the OSF has been able to reduce duplicative search efforts by utilizing search and examination efforts of the OFF, and (3) the OSF has been able to reduce the examination workload because the scope of the claims has been clarified during the OFF’s examination process.³²

Under the pilot program, Japan and the United States established several criteria which an applicant had to meet to be eligible to participate in the PPH program. The offices changed the

²⁸ John W. Duddas, *Patent Prosecution Highway Pilot Program Between the United States Patent and Trademark Office and the Japan Patent Office*, USPTO.GOV, 1 (May 22, 2006) http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/pph_pp.pdf.

²⁹ *Id.* at 2.

³⁰ John Gladstone Mills III, et al., *Patent Prosecution Highway (PPH) between the USPTO and the Japanese Patent Office*, 4 Pat. L. Fundamentals §21A:2 (2d ed.) (Database updated September 2010).

³¹ *See id.* at 1.

³² *Id.*

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pilot program criteria slightly when the program was made permanent in 2008. The criteria of the pilot program are explained below, followed by the changes made in changing to the permanent program.

For the pilot program, where the United States was the OSF, the application must have been a Paris Convention application validly claiming priority to one or more applications filed in the Japanese Patent Office (JPO).³³ A continuing application that validly claimed the benefit of a U.S. application that claimed priority from a JPO application was also eligible.³⁴ Initially the following applications were excluded: Patent Cooperation Treaty international applications, US provisional applications, plant and design applications, reissue applications, and reexamination proceedings.³⁵ However, subsequent agreements have allowed the use of Patent Cooperation Treaty international applications.³⁶ Additionally, a fee of \$130 was required to process the PPH application in the U.S.³⁷

Furthermore, the priority JPO application was required to have at least one claim that was determined patentable by the JPO.³⁸ The applicant had to submit a copy of the allowable claim(s) from the first-filed JPO application along with an English translation.³⁹ If the application was available via the Dossier Access System, the applicant could request that the USPTO obtain a

³³ Duddas, *supra* note 44, at 2.

³⁴ *Id.* With the expansion of the PPH network, numerous combinations of offices are possible. For a graphical representation of some possible combinations see Mills III, *supra* note 46, at 2-6.

³⁵ *Id.*

³⁶ *See id.* at 2.

³⁷ *See* Notice Regarding the Elimination of the Fee for Petitions To Make Special Filed Under the Patent Prosecution Highway (PPH) Programs [hereinafter Notice to Eliminate PPH Fee], 75 Fed. Reg. 29312 (effective date May 25, 2010).

³⁸ Duddas, *supra* note 44, at 2.

³⁹ *Id.*

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copy of the application via the Dossier Access System, but the applicant was still required to submit a translation.⁴⁰

The claims in the corresponding JPO application had to “sufficiently correspond” to the claims filed in the USPTO.⁴¹ The applicant could amend the US claims to sufficiently correspond to the JPO allowed claims, if they did not sufficiently correspond as originally filed.⁴² Claims were regarded as sufficiently corresponding where, accounting for differences due to translations and claim format requirements, the claims were “of the same or similar scope.”⁴³ The USPTO determined whether claims had “similar scope.”⁴⁴ Applicants also were required to submit a claims correspondence table indicating how all the claims in the U.S. application corresponded to the patentable claims in the JPO application.⁴⁵ In addition, the applicant had to submit a copy and translation of all the office actions, including a “Decision to Grant a Patent” from the JPO.⁴⁶ To be eligible, the U.S. application must not have entered examination prior to petitioning for accelerated review under the PPH pilot. Finally, the applicant must have complied with all 37 CFR 1.56 duties, including submitting an Information Disclosure Statement disclosing all material prior art, including that which was cited by the corresponding JPO examiner.⁴⁷ Applicants, again, had to submit copies and translations of these references.⁴⁸

⁴⁰ *Id.* at 3.

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *See* Duddas, *supra* note 44, at 3.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

If JPO was the OSF, the requirements were slightly different than if the USPTO was the OSF. In Japan, the application needed to be a Paris Convention application that validly claimed priority to a corresponding application in the USPTO.⁴⁹ The corresponding USPTO application must have had one or more claims that were “indicated as patentable” in the last office action.⁵⁰

The JPO defined “indicated as patentable” as:

(i) [t]he claims shown in the item of ‘[t]he allowed claim(s) is/are ___’ in a ‘Notice of Allowability’ of ‘Notice of Allowance and Fees due’; (ii) [t]he claim shown in the item of ‘[c]laim(s) ___ is/are allowed’ in ‘Office Action Summary’ of ‘Non-Final Rejection or ‘Final Rejection’; (iii) [t]he claims shown in the item of ‘[c]laim(s) is/are objected to’ in ‘Office Action Summary’ of ‘Non-Final Rejection or ‘Final Rejection’ and the USPTO examiner indicates that the claims are objected to as being dependent upon a rejected base claim, but would be allowable/patentable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.⁵¹

The JPO, similarly to the USPTO, defined that claims must “sufficiently correspond” to one or more of the claims indicated to be patentable in the latest office action of the corresponding OFF application. However, the JPO also allowed the application to utilize the PPH where the “claims of the application are narrower in scope than the claims indicated as allowable in the latest office action.”⁵² The JPO defined “narrower in scope” as an allowable

⁴⁹ Procedures to file a request to the JPO for Patent Prosecution Highway Program between the JPO and USPTO, Part I PPH using the national work products from the USPTO, 1 (effective Jan. 29, 2010) [hereinafter Procedures to File a Request to the JPO] *available at* http://www.jpo.go.jp/cgi/linke.cgi?url=/torikumi_e/t_torikumi_e/patent_highway_e.htm (last visited Mar. 17, 2011).

⁵⁰ *Id.*

⁵¹ *Id.* at 2.

⁵² *Id.*

claim that is amended to be further limited by an additional feature. Of course, the amendment must have found support in the specification of the application, with specification including the description and claims.⁵³ Furthermore, the JPO must not have begun examination of the application.⁵⁴

Under the permanent program, several changes were made to further streamline the PPH process. The permanent program expanded to include PCT applications that contain no priority claims.⁵⁵ In the U.S., the Electronic Filing System must be used to submit the request to process as a PPH candidate. Lastly, applicants no longer need to submit translations to English for all office actions; applicants need submit only the translation of the JPO office action immediately prior to the “Decision to Grant a Patent.”⁵⁶ These changes make the PPH program more accessible – first by decreasing translation costs, and second, by making the process available for a wider array of applications.

b. United States – Korea Permanent Program

The Korean Intellectual Property Office (KIPO) and the USPTO PPH pilot program commenced on January 28, 2008.⁵⁷ The permanent program followed one year later, beginning on January 29, 2009, after a determination that the pilot program “significantly expedites the acquisition of patent rights for applicants and enhances the efficiency of administrative work for

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ Procedures to File a Request to the JPO, *supra* note 65.

⁵⁶ *Id.*

⁵⁷ Press Release 09-01, U.S. Pat. & Trademark Office, *USPTO and KIPO to Implement Patent Prosecution Highway on Full-Time Basis* (Jan. 28, 2009), available at <http://www.uspto.gov/web/offices/com/speeches/09-01.htm>.

both offices.”⁵⁸ Implemented under “the same conditions as the pilot PPH,” the permanent program remains open for revision when necessary.⁵⁹

The requirements under the USPTO-KIPO agreement are substantially similar to those under the USPTO-JPO agreement.⁶⁰ Unlike the JPO pilot program, the KIPO program allowed applications submitted through the PCT to receive accelerated examination, an element later implemented in the permanent JPO program.

A key difference between the KIPO agreement and the JPO agreement is in the requirement for translations. Under the JPO agreement, the applicant in the JPO must obtain translations of the USPTO office actions and claims. However, under the KIPO program “Korean translations thereof are basically unnecessary.”⁶¹ This absence of a translation requirement represents a significant cost savings to the applicant. Furthermore, applicants do not need to provide the KIPO with copies of any references cited against the application in the USPTO that are patent publications.⁶² If a reference is non-patent literature, then the applicant is required to submit a copy of the reference to the KIPO.⁶³

In addition to a first filed priority application, the USPTO application can be an application derived from the basic application, for example a divisional application of a basic

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Compare* Procedures to file a request to the Korean Intellectual Property Office for Participation in the Patent Prosecution Highway Program between the Korean Intellectual Property Office and the United States Patent and Trademark Office, 1 (Jan. 28, 2008) [hereinafter Procedures to file a request to the Korean Intellectual Property Office] *available at* www.kipo.kr (last visited Mar. 17, 2011) *with* Duddas, *supra* n. 44.

⁶¹ Procedures to file a request to the Korean Intellectual Property Office, *supra* n. 76, at 3.

⁶² *Id.* at 4.

⁶³ *Id.*

application or early national stage entry into the USPTO the claim(s) of which are determined patentable by the USPTO.⁶⁴

c. Other Pilot Programs

As mentioned before, the number of PPH programs has steadily increased to become a global work-sharing network. Pilot programs have been the avenue to growth for the PPH, with bilateral and multilateral pilot programs implemented among offices such as Australia, Austria, Canada, Denmark, the European Patent Office, Finland, Germany, Hungary, Japan, Korea, Mexico, Russia, Singapore, Spain, and the United Kingdom. An important growth in the PPH program also came in the form of recognizing international applications under the USPTO-JPO agreement.⁶⁵ This recognition allowed a greater number of applicants to take advantage of the PPH network, as practitioners have increasingly relied on the PCT process to file internationally. The USPTO-KIPO program and many of the subsequent pilot programs reflect the amended stance towards PCT international applications originally implemented in the JPO permanent program.⁶⁶ Member states continue to remove barriers to the PPH programs; for example, the USPTO recently eliminated the fee to request PPH consideration.⁶⁷

III. *The Effect of the PPH Programs on the Presumption of Validity in the U.S.*

⁶⁴ *Id.*

⁶⁵ Procedures to File a Request to the JPO, *supra* n. 65, at 1.

⁶⁶ Procedures to file a request to the Korean Intellectual Property Office, *supra* n. 76.

⁶⁷ See Notice to Eliminate PPH Fee, *supra* note 53.

a. Examination Procedures

It is common practice among practicing attorneys to choose a searching body under the PCT based on perceived quality of search results. Anecdotal evidence suggests that the European Patent Office provides the most thorough examinations, and the most expensive. Similarly, it is known that KIPO provides the cheapest searches but has a reputation for not effectively searching non-Asian art. The United States has a reputation for falling somewhere in the middle, providing high quality searches on U.S. patent literature – but falling short regarding non-U.S. art. Regardless of reputation, however, each searching body generally seeks to monitor its searching quality.

International searching authorities in the PCT are required to assess search and examination procedures within their patent offices yearly, and submit a report outlining the quality management systems and any changes therein to the World Intellectual Property Organization.⁶⁸ Because the permanent PPH program nations – Japan, Korea, and the U.S. – are also international searching authorities, it is reasonable for an OSF to expect that a certain minimum amount of quality review exists in Japan, Korea, and the U.S. as the corresponding OFF. However, examining results vary widely among patent offices even with the quality review procedures. Also, as PPH pilot programs proliferate, the quality of search and examination may dramatically differ depending upon which nation was selected as the OFF.

This difference in examination quality presents an avenue for strategy by practitioners, looking for the OFF that will provide the lowest bar to patentability and using that potentially

⁶⁸ World Intellectual Prop. Org., PCT International Authority Quality Reports, <http://www.wipo.int/pct/en/quality/authorities.html> (last visited Mar. 22, 2011).

improvidently granted patent to subsequently gain rights in an OSF.⁶⁹ This tactic sacrifices quality in the issued patent for speed in the patent prosecution. A lower burden of proof for overcoming a statutory presumption of validity would decrease the attractiveness of this practice in the U.S. if the Supreme Court holds that a lower standard should apply, because patent holders that implement that strategy will have less confidence in their issued patent. This practice may pose a threat to countries that have a high presumption of validity and with applicants that are pooling patents to create leverage for licensing agreements (i.e. the applicant does not intend to ever enforce the patent against an infringer).

The examination procedures of the permanent program nations will subsequently be analyzed, paying particular attention to faults in a given patent office's process that causes the search and examination results to be suspect – potentially warranting a removal of the presumption of validity for PPH patents.

i. US Examination Procedures

In 1836, Congress reestablished the patent examination system, moving away from the failed registration system.⁷⁰ Under the 1952 Patent Act, an examination system is mandated.⁷¹ The statute requires that the USPTO must “cause an examination to be made” and to issue a patent if the applicant is so entitled.⁷² “Examination” is left for interpretation, and is defined by USPTO regulations. Under Rule 104, an examiner is required to investigate “the available prior

⁶⁹ See Shine S. Tu, et al., Squeezing More Patent Protection From a Smaller Budget Without Compromising Quality, 2 No. 2 Landslide 37, (Nov./Dec. 2009).

⁷⁰ For a brief history of patent examination systems in the US, see Jeffery, *supra* note 17, at 767.

⁷¹ 35 U.S.C. § 131 (2000).

⁷² *Id.*

art relating to the subject matter of the claimed invention” and ensure compliance with applicable law, patentability, and matters of form.⁷³ Many scholars have indicated that “locating relevant prior art” is one of the most important aspects of the patent examining process and is crucial to the integrity of the US patent system.⁷⁴

It is important to note that the USPTO is also given deference to make administrative decisions on the process and function of the agency.⁷⁵ As noted though, they are statutorily compelled to “cause an examination to be made.”⁷⁶

As in many areas of skilled labor, the quality of a prior art search is directly dependent upon the skill and diligence of the examiner performing the search. Scholars have noted that an “examiner’s judgment, competence, and experience are critical factors affecting prior art search quality.”⁷⁷ A Senate Judiciary Committee determined that an examiner’s judgment and competence in analyzing the subject matter of an invention, and its possible relation to prior art

⁷³ 37 C.F.R. § 1.104 (2002). See Jeffery, *supra* note 17, at 768.

⁷⁴ Notice of Public Hearing and Request for Comments on Issues Related to the Identification of Prior Art During the Examination of a Patent Application, 64 Fed. Reg. 28,803, 28,804 (May 27, 1999); Arthur Schwartz, *The effect of Mechanized Searching on Patent Practice and Litigation*, 44 J. Pat. Off. Soc’y 803, 804 (1962). See Jeffery, *supra* note 17, at 769.

⁷⁵ See *US v. Mead Co.*, 533 U.S. 218, 218 (2001) (Holding that an agency has the ability to speak “with the rule of law” where the agency is addressing ambiguity in the authority granting statute.) Here, the USPTO, in passing rules governing examination procedures is addressing the ambiguity of what it means to “cause an examination to be made” means. *But see* *Merck & Co. v. Kessler*, 80 F.3d 1543 (Fed. Cir. 1996) (USPTO not granted ability to make substantive rules of patentability)

⁷⁶ 35 U.S.C. § 131 (2000).

⁷⁷ Jeffery, *supra* note 17, at 770.

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are determinative of the quality of search and ultimately of the examination.⁷⁸ As one can imagine, time limitations will also affect the quality of the search results.⁷⁹

For traditional patent applications, examiners devote, on average, about 18 hours over a course of three to five years to searching for, evaluating, and applying prior art to the application.⁸⁰ Applicant submission of prior art is argued to be the most critical prior art source, as the applicant has already made an initial determination that the art is pertinent.⁸¹ However, empirical evidence has shown that examiners generally rely on finding their own prior art from which to form rejections, as opposed to utilizing the applicant-submitted art.⁸² Furthermore, a relatively low percentage (11%) of prior art listed as being examined in a US patent is actually cited in rejections.⁸³ Not only are applicant-submitted references cited infrequently, but when they are cited, US examiners have a noticeable bias toward references they have found themselves – with 87% of art used to make rejections having been found by the examiner.⁸⁴ While this study was conducted to determine the efficacy of the duty to disclose imposed on applicants in the United States, its findings are applicable here in reference to the human

⁷⁸ SENATE SUBCOMM. ON PATENTS, TRADEMARKS, AND COPYRIGHTS OF THE COMM. ON THE JUDICIARY, 86TH CONG., THE EXAMINATION SYSTEM IN THE U.S. PATENT OFFICE, STUDY NO. 29, 16 (Comm. Print 1961) [hereinafter S. Jud. Comm. Study No. 29].

⁷⁹ See Jeffery, *supra* note 17, at 770.

⁸⁰ Christopher A. Cotropia, et al., *Do Applicant Patent Citations Matter? Implications for the Presumption of Validity*, (working paper), 1, <http://ssrn.com/abstract=1656568> (last visited Mar. 15, 2011).

⁸¹ *Id.* at 7.

⁸² See *Id.* at 8. Empirical studies, conducted on a 1% random sample of all utility patents issued in 2007, show that over three-quarters of the art, against which patentability is determined, is submitted by applicants, with about 63% being patent literature.

⁸³ *Id.* The examiners only cited, in a 1% random sample of 2007 applications, to 3,378 references of a total of 32,180 references listed on the front of a patent in actual rejections – under §102 and § 103 grounds. *Id.* at 8-9.

⁸⁴ See *Id.* at 11-12 (noting that over a third of examiner cited art is used in rejections, while only about 2% of applicant submitted art is used).

elements of U.S. examiners in their preference for U.S. literature, whether by unconscious bias or by inability to perform exhaustive and meaningful non-US patent searches.

Analysis of the varying types of art examiners are finding and citing, and the relative frequencies of each, casts doubt on the ability of PPH programs to yield high quality examinations for Offices of Second Filing. U.S. patent literature citations account for 34% of art cited in U.S. prosecution, but foreign citations account for only approximately 6%. It is clear that U.S. patent examiners are devoting significant more resources to searching domestic patent literature than they are to searching foreign patent literature. The inability or unwillingness of USPTO examiners to capture non-U.S. patent literature calls into question whether any foreign patent office would long rely on a U.S. examiner's ability to perform a meaningful search on their applications. Without that ability to rely on the OFF's results, the amount of work saved by non-U.S. patent offices participating in the PPH will be diminished as they must essentially search the application from scratch in non-U.S. patent literature databases. A plausible explanation for the difference in relative examiner-found art citations and applicant-submitted art citations is that the applicant-submitted art is simply not that relevant. The fear of inequitable conduct in the U.S. has caused patent practitioners to submit all art of which they are aware without making a determination of materiality, resulting in the submission of minimally-pertinent prior art.⁸⁵ However, a major source of U.S. prior art submissions is from non-U.S. search reports, especially PCT search reports.⁸⁶ This foreign search report submission is most analogous to the situation presented to examiners under the PPH.

⁸⁵ Cotropia, *supra* note 96, at 19.

⁸⁶ *Id.*

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Even when the European Patent Office determines a reference to be relevant, the examiner is still unlikely to use the EPO-found reference.⁸⁷ This result suggests that there is more involved with examiners' citation preferences than simply the submission of irrelevant art by applicants. This result may suggest that US examiners are employed in a system that rewards them for performing searches, even if art is already given to them. If this suggestion is true, the PPH process may help alleviate the unnecessary search performance, since under the PPH examiners are instructed to use the search and examination of the non-U.S. counterpart and are thus directly forced to use submitted art. This requirement to use the submitted art is an improvement over the traditional application process in which applicants must submit art to the examiner, but the examiner may ignore it if he chooses – although the examiner does initial that the submitted art has been reviewed.

The USPTO has implemented procedures for measuring prior art searches for their examiners.⁸⁸ Data collection on search criteria, under the Evaluation of Search Quality Plan, occurs at two data collection points as part of the standard review process: (1) day-to-day review of searches conducted by novice examiners, and (2) in-process review of applications.⁸⁹ The estimated benefits of this Evaluation Plan include enhancing the quality of substantive examination, since examiners will have better training programs based on improved feedback to examiners.⁹⁰

⁸⁷ *Id.* at 22.

⁸⁸ U.S. PAT. & TRADEMARK OFFICE, EVALUATION OF SEARCH QUALITY 1, *available at* <http://www.uspto.gov/web/offices/com/strat21/action/q5p17b.htm> (last visited Mar. 15, 2011).

⁸⁹ *Id.*

⁹⁰ *Id.* at 2.

Of course, searching for prior art is not the only function of the examiner. The second, and critically important, role is to be the quasi-judicial evaluator of the prior art found, the application, and the substantive patentability criteria. When the U.S. is the OSF, the examiners are essentially operating in a bifurcated process, wherein one examiner – the OFF – is performing the search, and the U.S. examiner is then examining the application for conformance with U.S. substantive law and custom. As the European Patent Office (“EPO”) demonstrated in the Nineties, a bifurcated search and examination process leads to a lower quality examination procedure.⁹¹ This bifurcated scenario is less desirable than a traditional unified search-examination process because the activity of searching allows the examiner to gain an in-depth understanding of the application, the contours of the potential prior art field, and the relevant prior art itself. Bifurcating the process removes this essential step from the PPH process and is therefore expected to yield a lower quality examination in the OSF.⁹²

ii. JPO Examination Procedures

In 2005, the *Headquarters for Expeditious and Efficient Patent Examination* was created to tackle the rapid growth in numbers of patent application filing and examination requests within Japan.⁹³ Recognizing the importance of high quality searches and examinations, the JPO

⁹¹ During the later years of the Twentieth Century, the European Patent Office wrestled with developing a high quality examination procedure. The EPO determined, through the implementation of the *BEST* program (“Bringing Examination and Search Together”), that a unified single searcher and examiner was the most efficient and highest quality process. See Crab, *supra* note 19.

⁹² Furthermore, the European Patent Office formally moved away from a bifurcated search, thus their participation in the PPH programs is a reversion in EPO practice.

⁹³ Report Under Paragraph 21.17 of the PCT International Search and Preliminary Examination Guidelines [hereinafter Quality Report by JPO] (Dec. 28, 2006)

implemented a four-tier committee program to review and monitor patent quality.⁹⁴ The committees include: (1) Examination Guideline and Practice Committee, (2) Human Resources Committee, (3) Examination Planning Committee, and (4) Infrastructure Planning Committee.⁹⁵

Japanese guidelines for examination state that examiners are to focus on (1) conducting uniform examinations, (2) “mak[ing] an effort to ensure and improve the quality of examination with respect to prior art search and judgment...”, and (3) performing efficient examinations by communicating with the applicants.⁹⁶ This emphasis on prior art searching, occurring on the first page as a guiding principle of examination, reflects the JPO’s understanding and commitment to quality searches and thus quality examination processes.

b. The Presumption of Validity in the United States

Under U.S. law, a patent shall be presumed valid.⁹⁷ Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims.⁹⁸ The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.⁹⁹

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Examination Guidelines for Patent and Utility Model in Japan, *Part IX: Procedure of Examination*, 1 (March 2009), available at http://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/1312-002_e.htm.

⁹⁷ 35 U.S.C. § 282 (2000)

⁹⁸ *Id.*

⁹⁹ *Id.*

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The presumption of validity in the United States carries an evidentiary burden that is widely attributed to the Court of Appeals for the Federal Circuit (CAFC).¹⁰⁰ The CAFC rejected a higher, “beyond a reasonable doubt” standard, in favor of the “clear and convincing standard” which was being implemented by many circuits prior to the creation of the CAFC.¹⁰¹ Some have argued that imposing a higher evidentiary standard for issued patents is improper for issues that were not before the USPTO, but this is not a position yet taken by the courts.¹⁰²

The CAFC has also recognized that examiners do not always examine patents over every piece of possible prior art. In cases of prior art not examined by the governmental agency, deference is not afforded the USPTO and the finder of fact is allowed to place more evidentiary weight on art not previously examined by the USPTO than they place on art that is examined by the USPTO.¹⁰³ The CAFC has stated, however, that the burden of proof – clear and convincing evidence – is the appropriate burden in all instances and does not depend on whether the art was

¹⁰⁰ FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE COMPETITION AND PATENT LAW AND POLICY (2003) [hereinafter FTC REPORT] *available at* <http://www.ftc.gov/os/2003/10/innovationrpt.pdf> (arguing that the balance between competition and patent policy has swung too far in the favor of patents).

¹⁰¹ Mark Janis, *Reforming Patent Validity Litigation: The “Dubious Preponderance”*, 19 BERKELEY TECH. L.J. 923, 929 n.31 (2004) *citing* Am. Hoist & Derrick Co. V. Sowa & Sons, Inc., 725 F.2d 1350, 1360 (Fed. Cir. 1984).

¹⁰² The Supreme Court is currently hearing this very issue in *Microsoft v. i4i*, however, the idea of administrative correctness may transcend their decision allowing the Federal Circuit to implement the clear and convincing standard in a fair manner, regardless of the Supreme Court’s decision. *See* Jeffery, *supra* note 17; Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. Rev. 1495, at 1528-29; Charles E. Phipps, *The Presumption of Administrative Correctness: The Proper Basis for the Clear and Convincing Evidence Standard*, 10 Fed. Cir. B.J. 143, 149-150 (2000)(explaining the concept of administrative correctness and its relation to the clear and convincing standard).

¹⁰³ Janis, *supra* note 117, at 929. *See also* Jeffery, *supra* note 17, at 765-66.

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previously examined. This practice is the central issue in the current Supreme Court case of *Microsoft v. i4i*.¹⁰⁴

The petitioners, *Microsoft*, rely heavily on the U.S. Supreme Court's decision in *KSR Int'l Co. v. Teleflex Inc.*, which stated that the rationale underlying the presumption is that the USPTO has the field expertise to make patentability determinations and should be afforded due deference for such determinations. However, if the USPTO does not have the information required to make that determination, for instance if pertinent prior art is not examined by the examiner, then this presumed expertise is "much diminished."¹⁰⁵ As respondents rightly point out, this logic was merely dicta in the KSR opinion. However, the KSR opinion is a window into the minds of the Supreme Court and may be a foreshadowing of their impending decision in *Microsoft v. i4i*.

The CAFC, in explaining the current practice of giving more evidentiary weight to non-examined art, stated:

When no prior art other than that which was considered by the USPTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job. . . . When an attacker, in sustaining the burden imposed by §282, produces prior art or other evidence not considered in the USPTO, there is, however, no reason to defer to the USPTO so far as its effect on validity is concerned. . . . What the production of new prior art or other invalidating evidence not before the USPTO does is to eliminate, or at least reduce the element due the USPTO,

¹⁰⁴ *Microsoft Co. v. i4i Ltd. Partnership*, No. 10-290, 131 S. Ct. 647, 647 (2011) *cert granted*.

¹⁰⁵ *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 425 (2007).

thereby partially, if not wholly, discharging the attacker's burden, but neither shifting nor lightening it or changing the standard of proof.¹⁰⁶

This procedure is generally thought to simply give more weight to art not examined by the USPTO, as opposed to reducing the burden of proof.¹⁰⁷ However, *Microsoft* is urging the Supreme Court to adopt an actual lowering of the burden of proof for this type of art not examined by the USPTO.¹⁰⁸

During prosecution of a patent in front of the USPTO, the USPTO must only meet the preponderance of the evidence standard – a lower standard than the clear and convincing standard currently imposed in District Courts.¹⁰⁹ It is this preponderance standard that *Microsoft* suggests should be the standard in the courts for art that was not examined by the USPTO. This is logical for the same reasons that the preponderance standard is used in the USPTO. When art is examined for the first time, either because the USPTO is looking at it for the first time or because a court is looking at it for the first time, the public policy of discouraging patents that are improvidently granted over prior art dictates that we have a lower standard than clear and convincing evidence. In essence, when more evidence suggests that prior art would render the application unpatentable than evidence suggests that it is patentable, no patent rights should be

¹⁰⁶ Am. Hoist, 725 F.2d at 1359. *See* *Contour Chair Lounge Co. v. True-Fit Chair, Inc.* 648 F. Supp. 704, 716 (E.D. Mo. 1986) (“Introduction of prior art not considered by the examiner can help the validity challenger carry its burdens . . . but it does not weaken or otherwise affect the statutory presumption of validity.”); *Janis*, *supra* note 117, at 929-930; *Jeffery*, *supra* note 17, at 765-66.

¹⁰⁷ *See* Transcript of Oral Argument at *26, *Microsoft Co. v. i4i Ltd. Partnership*, 2011 WL 1464882 (2011) (No. 10-290).

¹⁰⁸ *See* Brief for Petitioner, *Microsoft Co. v. i4i Ltd. Partnership*, 131 S. Ct. 647 (*petition for cert. filed* Aug. 27, 2010) (No. 10-290), 2011 WL 1225714, at *19.

¹⁰⁹ *See, e.g., In re Caveney*, 761 F. 2d 671, 674 (Fed. Cir. 1985). *See* *Jeffery*, *supra* note 17, at 766.

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granted. This lower standard reflects the concerns shown by Justice Breyer in the oral argument in *Microsoft v. i4i*, that the harms of an improvidently granted patent are at least as detrimental, if not more so, to the national economy than the harms associated with not granting an inventor patent rights.¹¹⁰ The respondent, *i4i*, along with the U.S. Government argue for the clear and convincing standard, relying on the arguments that the CAFC also proposes. The chief argument is that there is no precedent for having a low burden of proof for overcoming the presumption of validity.

I4i also argues that the clear and convincing standard promotes uniformity across the districts, which reinforces the reasons for creating the CAFC in the first place and provides patent holders certainty in their rights, which will promote the arts and useful sciences.¹¹¹ Furthermore, *i4i* suggests that creating a dual standard of preponderance of the evidence for non-examined art and clear and convincing evidence for examined art will add a very difficult factual inquiry to patent litigation – namely determining what was and was not examined.¹¹²

Although the evidentiary standard for the statutory presumption of validity has not changed since the creation of the CAFC,¹¹³ the CAFC's handling of the presumption has

¹¹⁰ Transcript of Oral Argument at *13, *Microsoft Co. v. i4i Ltd. Partnership*, 2011 WL 1464882 (2011) (No. 10-290).

¹¹¹ Brief for Respondent, *Microsoft Co. v. i4i Ltd. Partnership*, 131 S. Ct. 647 (*petition for cert. filed Aug. 27, 2010*) (No. 10-290), 2011 WL 1225714, at *19; *see generally* U.S. Const. art. 1, § 8, cl. 8.

¹¹² This is especially true when considering that cumulative art may not be listed as “examined” by the examiner because it was simply that, cumulative. This fact works against the goals of the PTO because a finding in favor of Microsoft will require examiners to list and examine all art regardless of its relevance and cumulativeness.

¹¹³ *See, e.g., Elan Corp., PLC v. AndrX Pharmaceuticals, Inc.* 366 F.3d 1336, 1340 (Fed. Cir. 2004) (“Patents are presumed to be valid, 35 U.S.C. § 282 (2000), and an accused infringer challenging the validity of a patent under the on-sale bar must demonstrate by ‘clear and

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changed over time.¹¹⁴ This fluidity implies that the CAFC is capable of changing the “overlying message delivered by the presumption of validity without changing the language of the evidentiary standard.”¹¹⁵ This is a critical insight, as it is unlikely that a statutory change to the presumption of validity will accompany the proliferation of work-share agreements in the United States, but the court system’s treatment of the presumption in cases involving such agreements may be malleable. Of course, the Supreme Court’s decision in *Microsoft v. i4i* has the potential to dramatically change the CAFC’s treatment of the presumption.

Whether the evidentiary standard actually changes remains to be seen, but the practice of giving more evidentiary weight to art not previously examined than to art that is examined by the USPTO will likely continue, and may be coupled with a lower burden of proof. In this situation, an applicant is assured that, during litigation, the examiner’s findings will be afforded deference with a high burden of proof and evidentiary deference to the USPTO. This preserves confidence in the prosecution of patents, and may even create a more robust prosecution process, if there is a lower burden of proof for non-examined art, as applicants will be incentivized to be sure that examiners are receiving and reviewing all of the available relevant art. Likewise, the

convincing evidence’....”); *Norian Corp. v. Striker Corp.*, 363 F.3d 1321, 1326 (Fed. Cir. 2004)(“The jury was correctly instructed that a party seeking to invalidate a patent must do so by clear and convincing evidence.”).

¹¹⁴ *Janis*, 19 BERKELEY TECH. L.J. at 930-31 *citing to* *University of Rochester v. G.D. Searle & Co.*, 358 F.3d 916 (Fed. Cir. 2004)(holding that even when a defendant produces no evidence on the written description requirement at the district court trial, the presumption of validity does not foreclose the possibility that “the patent in suit proves its own validity” and *Rochester’s* patent “clearly and convincingly does just that.”). *See, e.g.*, *Buildex Inc. v. Kason Indus., Inc.* 849 F.2d 1464 (Fed. Cir. 1988)(stating that “even under a ‘clear and convincing’ standard, proof need not be airtight.”); *Chiron Corp. v. Genentech, Inc.* 363 F.3d 1247 (Fed. Cir. 2004)(holding that the jury need not be instructed that the presumption of validity exists, so long as they are instructed of the clear and convincing standard by which to test facts).

¹¹⁵ *Janis*, 19 BERKELEY TECH. L.J. at 931.

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presumption of validity in the United States is weakest when an examiner has not examined potential prior art and issued the patent in a vacuum as to a particular piece of art.¹¹⁶ This situation is least assuring to the applicant, as it will be forced to essentially re-prosecute each patent any time litigation occurs, without the benefit of deference to the examiner's findings. The former scenario is preferred by applicants and patent holders as it provides a stable strategic framework from which to base decisions regarding the enforcement, licensing, and generally, the protection of the invention.

The respondent, *i4i*, urges that reexamination proceedings are the appropriate forum for eliminating improvidently granted patents at the preponderance of the evidence standard.¹¹⁷ However, as is the case in *Microsoft v. i4i*, not all types of prior art are eligible for reexamination procedures and therefore reexamination will provide only a minimal amount protection from improvidently granted patents. Furthermore, there is a standard debate in administrative law at play here: whether an administrative proceeding provides the same level of protection for the public as does a separate judicial action. This argument is grounded in separation of powers principals and is likely to play a role in the *Microsoft* decision.

¹¹⁶ This scenario is already seen as a negative in the patent community as practitioners have a general disdain for first-action allowances because it generally means either that prior art was not found by the examiner and is lurking to be found by potential infringers, or that the attorney failed to claim the invention as broadly as he could have.

¹¹⁷ Brief for Respondent, *Microsoft Co. v. i4i Ltd. Partnership*, 131 S. Ct. 647 (*petition for cert. filed Aug. 27, 2010*) (No. 10-290), 2011 WL 1225714, at *19.

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International actors have submitted amici briefs to the Supreme Court because of the potential far-reaching effect of this decision¹¹⁸ The international amici do not support either party, and instead suggest a flexible standard that will reflect the reality of examination practices. Mainly that “the rigor with which a patent is examined by the patent office may vary widely based on a number of factors, from the crowdedness of the relevant field, the policies of the examiner and art unit in question, the quality knowledge, and effectiveness of typically newly approved and little tested first year examiners, to the huge backlog of the patent office.”¹¹⁹ It is clear from this statement that the international community is also concerned with the quality of examination in the U.S., which, as they point out, is affected dramatically by the skill and diligence of the examiner.

If the Supreme Court lowers the burden of proof for art not examined by the USPTO, applicants must take caution to ensure a quality examination. This effect will make the PPH program less desirable as the OSF cedes control of examination to the OFF. Depending on the OFF, applicants will not have reasonable expectations that OSF prior art is thoroughly searched during the OFF prosecution. Because of relative differences in examination procedure between member nations of the PPH programs, quality control practices in the respective nations, infrastructure differences of the nations, substantive law differences between nations, and a loss of control for the OSF in the search and examination of the application in the OFF PPH applicants should be wary of using the PPH with the USPTO as the OSF regardless of the Supreme Court’s decision in *Microsoft*, but especially if the Court lowers the standard.

¹¹⁸ See generally Brief for Federation Internationale Des Conseils En Propriete as Amicus Curiae in Support of Neither Party, *Microsoft Co. v. i4i Ltd. Partnership*, 131 S. Ct. 647 (2011) (No. 10-290), 2011 WL 343076.

¹¹⁹ *Id.* at 8-9.

c. Effects of the PPH on Examination and the Presumption of Validity

The USPTO, much like other federal agencies, is under intense budget pressure.¹²⁰ Coupled with pressures applied by a White House that is clamoring to create jobs through innovation,¹²¹ budget pressures may lead the USPTO to sacrifice quality review for quick review. The PPH applications reflect this trend, with a low number of office actions per disposal and a high allowance rate.¹²² Currently, there have been no U.S. appellate level cases addressing the presumption of validity afforded to a PPH patent directly. But, following the logic used in *KSR* and put forth by the appellants in *Microsoft*, a reviewing court should look at all PPH applications with a skeptical eye, being wary of results sharing – simply taking the work of the OFF and deeming that sufficient without consideration of substantive differences and without critically determining the adequacy of the work performed in the OFF – rather than work sharing.

Under the PPH, it is a misconception that the OSF will simply allow an application if the OFF has. After all, it is a work-share program, not a result-share program. The stated main benefit is an accelerated review, moving a PPH candidate to the front of the line for

¹²⁰ This is especially true now, as the current Congress has failed to pass a permanent budget, and the Government is operating on a string of continuing measures. These continuing measures have capped USPTO funding at the fiscal year 2010 rate, even though the USPTO is completely funded by user fees, costing US taxpayers nothing. President Obama's proposed budget, which is supported by intellectual property organizations, will increase funding in fiscal year 2011 and 2012 to help address the patent backlog by appropriating funds to hire more U.S. examiners. *See Intellectual Property Owners Association, supra* note 4.

¹²¹ President Obama has declared that the United States must “win the future” with innovation. Barak Obama, President, U.S., Remarks by the President in State of Union Address (Jan. 25, 2011) *available at* <http://www.whitehouse.gov/the-press-office/2011/01/25/remarks-president-state-union-address> (last visited Mar. 31, 2011).

¹²² *See* USPTO Introduction to PPH, *supra* note 29, at 7.

examination.¹²³ However, by looking at the results of pilot programs in which the USPTO has participated, one may begin to question whether examiners are in fact engaging in a results-sharing program.

Looking at the average pendency times in the USPTO, we see that the goals of the PPH network are generally being realized.¹²⁴ This is to say, the number of office actions has fallen from an average of 2.7 office actions per disposal for non-PPH cases, to an average of 1.7 office actions for PPH cases.¹²⁵ This result of eliminating an office action per application does quicken the pace of prosecution but may lead to lower quality examination. Examination is successfully accomplished when there is a back and forth between examiner and applicant. By having a discourse, the examiner is able to refine his understanding of the invention and the prior art, allowing for a more precise and cogent examination. When the number of office actions is decreased, the examiner loses an opportunity to refine his or her understanding of the application and thus may render a decision based on an incomplete appreciation of the intricacies of the application and the prior art associated with that application. Precautions must be taken to ensure that an ongoing discourse is still achieved between the examiner and the applicant. The USPTO has sought to ensure this by directing examiners to engage in more interviews with applicants, either in person, over the telephone, and most recently with video-conferencing software, such as Skype™.

¹²³ See U.S. PATENT AND TRADEMARK OFFICE, PPH BROCHURE 1 *available at* http://www.uspto.gov/patents/init_events/pph/index.jsp (last modified Mar. 29, 2011).

¹²⁴ First action pendency times in the USPTO have dropped from an average of 25 months for non-PPH cases and only 2-3 months for PPH cases after filing the PPH petition to make special. PPH: Fast Track Examination of Applications, *supra* note 24.

¹²⁵ *An Introduction to Patent Prosecution Highway (PPH)* [hereinafter USPTO PPH PowerPoint], USPTO, www.uspto.gov/patents/pph/index.html (powerpoint presentation discussing the basics of the PPH).

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Allowance rates provide further evidence that examination may be less thorough in the United States for PPH applications than for non-PPH applications. A clear difference is discernable in the allowance rate for PPH cases compared to non-PPH cases. As of July 2009, the overall allowance rate for PPH applications was 95%, while for non-PPH applications, the rate was 44% – less than half the PPH rate.¹²⁶ This extraordinarily high allowance rate may be indicative of an examination procedure that is less thorough, with applications being “rubber-stamped” by examiners. An alternative explanation is that there is a self-selection process for submitting an application as a PPH case, with applicants selecting to submit applications in the PPH that are more frequently clearly patentable. Yet a third explanation is that the PPH process works and OFFs are performing high quality examination processes and sufficiently narrowing priority applications to acceptable levels for the OSF.

The PPH procedure in the United States calls for utilization by the OSF of the search and examination conducted by the OFF. As mentioned, relying on the OFF search weakens the examination process by removing a crucial step in the examination process. By conducting a search, the examiner gains an integral knowledge of the application and of the contours of the state of the art. Utilizing someone else’s search effectively removes the examiner’s understanding of the state of the art, which is limited to a simple report. In the U.S. examiners are still required to conduct a supplemental search, if necessary, but this supplemental search will be of limited applicability with another examiner’s results sitting there for easy usage. Because

¹²⁶ USPTO PPH PowerPoint, *supra* note 115. *See also* JAVIER JORGE, CANADIAN INTELLECTUAL PROPERTY OFFICE, REPORT ON THE PATENT PROSECUTION HIGHWAY PILOT PROGRAM BETWEEN THE CANADIAN INTELLECTUAL PROPERTY OFFICE AND THE UNITED STATES PATENT AND TRADEMARK OFFICE FOR THE TRIAL PERIOD OF JANUARY 28, 2008 TO JANUARY 28, 2009 (2009)(Canadian allowance rates for PPH applications could be as high as 61%)

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U.S. examiners have a significant workload, the bias amongst examiners (dictated by human nature) will be to rely heavily on the low-hanging fruit – the OFF search report. This phenomenon may lead to a greater number of issued patents that have pertinent prior art not examined by a US examiner.

In the PPH program, the OSF has effectively ceded control over the search and examination to the OFF. This cession is detrimental to the OSF as the OSF loses control over the narrowing process for the patent – a critical step to insuring compliance with the substantive patent laws.

Similarities between the PPH program, initiated in 2006, and the plan under George W. Bush to privatize searching efforts are instructive and highlight this problem of ceding control. Academics and practitioners alike criticized the privatization scheme for not providing adequate oversight of the private searching entities.¹²⁷ Oversight is seen as crucial to controlling quality because of concerns over controlling functions that effect the examiner's ability to employ his or her skill and diligence. These functions include hiring practices, databases used to search, classification systems, infrastructure, work load of searchers, mentoring and training, and payment incentives. The PPH program, when viewed as an outsourcing scheme, brings the criticisms of the privatization plan closer to reality than the original privatization plan did. Under a privatization plan, strong contracting between the patent office and the private entity alleviates concerns, such as losing control of hiring practices. However, under the PPH, the OSF

¹²⁷ See John A. Jeffrey, 52 Cath. U.L. Rev. 761, 762 (2002). *But see* Gene Quinn, *Is It Time to Privatize the Patent Office?*, IPWATCHDOG.COM (Sept. 29, 2010, 11:57 AM), <http://ipwatchdog.com/2010/09/29/is-it-time-to-privatize-the-patent-office/id=12649>.

loses the ability to draft strong oversight language into the agreement as the counterpart patent office answers to its own sovereign government and not to the contracting party.

Even after *KSR* and the impending decision in *Microsoft v. i4i*, the USPTO should be afforded due deference when it is applying its field expertise. The question then becomes: what does the USPTO's expertise look like and what is an *application* of field expertise? Surely, one would say the USPTO is expert at applying substantive patent law to a particular application. On its face, a PPH application is just that. The USPTO is making a judgment of whether the application conforms to US patentability criteria. However, if there are factors that weaken the expertise, or suggest that it was not applied diligently – for instance, not actually examining all of the available art – then the USPTO should not be afforded the same level of deference as they would be when an application has received a complete and thorough examination including all pertinent art.¹²⁸ Looking at the allowance rate and the average number of actions per application, which relates to the average time spent by the examiner on the application, the presumption that the USPTO has *applied* its field expertise in the PPH program is not so clear.

IV. Recommendations

Practitioners should seek to strategically implement the true cost saving potential of the PPH. But, in order to protect against a patent that is subject to unnecessary risk due to a lower presumption of validity, the applicant must develop a systematic filing strategy. This strategy should seek to identify PPH candidates early. By identifying candidates early, applicants can most effectively make OFF determinations, including where to file the priority application and

¹²⁸ See *KSR*, 550 U.S. at 426.

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how to conduct the prosecution in that OFF. Conducting the prosecution in the OFF with the reality that the narrowed claims are then going to be replicated in the OSFs will allow the applicants to strategically narrow the claim sets with multiple countries' substantive laws in mind, and not just that of the OFF. Furthermore, early identification of PPH candidates will present cost and time savings as applicants can strategically select an OFF that will provide a short pendency, or alternatively chose an OFF that has a very robust search practice such as the European Patent Office.

Applicants should also establish protocols to continue monitoring applications as they are prosecuted so as to file petitions to make special under the PPH as early as possible. This will result in time and cost savings as the first action pendency is greatly reduced, but is only from the time that the petition is filed. The earlier the application is identified as an allowed claim in the OFF, the earlier the OSF petition can be filed.

As mentioned, applicants should strategically chose the OFF with the potential for a lower evidentiary standard for PPH patents in mind. By selecting as an OFF a country in which the applicant is most likely to seek enforcement, the applicant can ensure that the application will have at least the same protection as a traditionally examined patent in the OFF.

Patent offices can strategically implement the PPH to minimize the risk of improvidently granting patents through the PPH mechanism. Offices should engage in agreements only with other offices that have a robust quality control system in place ensuring quality examinations in the OFF. One way to ensure this is to enter into agreements only with states that are registered searching authorities under the PCT because this registration requires a quality control program. Also, offices should enter into agreements only with nations that have similar substantive laws as

their own.¹²⁹ Furthermore, patent offices must monitor the member states to prevent against nationalistic tendencies of the offices. The risk is that an office will favor citizens of their own country, either by searching and examining less rigorously for citizen inventors or by examining their applications faster than those non-citizens, when that office knows that the citizen inventor is going to utilize the PPH. This type of practice may allow an OFF to give its citizens a competitive advantage in an OSF.

V. Conclusion

The mere existence of invalid patents can injure competitive markets.¹³⁰ Scholars, judges, and even Supreme Court Justices have all remarked on the oddity of the presumption of validity of an issued patent over art that was not before the agency.¹³¹ Previously, it has been shown that the presumption may not be wisely applied even to art that was cited and considered by the examiner.¹³² So too with patents issued through the PPH. Because of the wide spectrum in quality of patent examiners throughout the PPH network and the relatively myopic tendencies of patent examiners, the PPH program may result in improvidently granted patents in the offices of second filing, as pertinent prior art may go unfound and unexamined in the push to issue patents quickly through the PPH programs. A presumption of validity should not attach with the same force to a patent issued through the PPH as for traditionally examined patents, as the agency will

¹²⁹ For instance, one might question the logic of the USPTO entering into an agreement with SIPO as the two bodies of substantive patent law diverge in several key areas.

¹³⁰ Christopher R. Leslie, *The Anticompetitive Effects of Unenforced Invalid Patents*, 91 MINN. L. REV. 101 (2006).

¹³¹ See *Cotropia*, *supra* n. 96, at 25 citing to *KSR*, 550 U.S. at 425.

¹³² *Cotropia*, *supra* n. 96, at 26.

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be unable to control training practices, searching practices, and substantive determinations affecting the scope of the issued patent in the offices of first filing.

The Supreme Court's impending decision in *Microsoft v. i4i* has the ability to dramatically change the evidentiary standards attendant to the presumption of validity. If the standard is lowered to the preponderance of the evidence, applicants should rethink their strategic decisions surrounding the PPH petitions to make special. In any event, applicants must ensure that the OSF renders a complete search and examination of the application while still providing an faster examination process than the traditional examination process.

As Voltaire so astutely said: "with great power comes great responsibility."¹³³ The Patent Prosecution Highway certainly is a powerful tool for both offices and applicants. The PPH has the potential to decrease pendency in patent offices, which results in cost savings for both applicants and offices alike. The responsibility lies with both the implementing offices and the applicants, however, to implement strategies that will seek to reduce the risk of prior art that is not examined in the office of second filing – thus insuring the integrity of what is left of the presumption of validity afforded to issued patents.

¹³³ Adrien Jean Voltaire, et al., *Œuvres de Voltaire*, V. 48 (1832).